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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/956,953	09/21/2001	Yoshiharu Yabuki	0649-0803P-SP	2457

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EXAMINER

ALEXANDER, LYLE

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 03/05/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/956,953

Applicant(s)

YABUKI ET AL.

Examiner

Lyle A Alexander

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1743

Claim Rejections - 35 USC § 112

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is a method of "detecting ..." but fails to provide any steps of contacting the composite material with moisture or wetness as required by the preamble. Furthermore, "detection of a history of contact with moisture" does not further limit the preamble. It is also not clear what steps are contemplated by "detection of a history of contact with moisture". Finally the claim is vague and indefinite as to how upon contact with moisture the methine dye reacts with the spatially isolated decoloring agent (e.g. how do the two get together ?).

Claims 2-4 are vague and indefinite as to how the label is constructed so that upon contact with moisture the methine dye reacts with the spatially isolated decoloring agent (e.g. how do the two get together ?).

Claim 14 is vague and indefinite as to how the various "histories" are detected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 1743

Claims 4 and 14 are rejected under 35 U.S.C. 102(b,a) as being clearly anticipated by Timmons et al or JP 2000105230 respectively.

In light of the above 35 USC 112 issues, the claims are best understood as a colorimetric device changes color in the presence of moisture.

Timmons et al. teach a moisture indicator where the color pattern disappears in the presence of moisture.

JP 2000105230 teaches a method and compound for the detection of moisture contact history by the decoloring of coloring agent. As the reference is best understood compound A is discolored by compound B. Exemplary of compound A is flourane.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 1743

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5-6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000105230 in view of Ohtsu et al. or Chosa.

In light of the above 35 USC 112 issues, the claims are best understood as a colorimetric device changes color in the presence of moisture.

JP 2000105230 teaches a method and compound for the detection of moisture contact history by the decoloring of coloring agent. As the reference is best understood compound A is discolored by compound B. Exemplary of compound A is flourane.

JP 2000105230 is silent to the claimed methane dye.

Ohtsu et al.(see col. 6 lines 23-25) and Chosa (see col. 3 lines 49-54) teach flourane and methine dyes as equivalents.

The court decided In re Boesch (205 USPQ 215) that optimization of a result effective variable is ordinarily within the skill of the art. A result effective variable is one that has predictable, well known or equivalent functions. It is also desirable when manufacturing a device to select from equivalent components based upon availability and cost.

Art Unit: 1743

It would have been within the skill of the art to modify JP 2000105230 in view of Ohtsu et al. or Chosa and use methine dye as an equivalent for flourane as optimization of a result effective variable and to use readily available and possibly lower cost equivalent components.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000105230 in view of Greyson et al.

See JP 2000105230 *supra*.

JP 2000105230 is silent to the use of gelatin as a binder and the claimed interlayer thickness of 0.1 to 100 microns.

Greyson et al. teach in column 3 lines 43+ binders are useful to adhere the dyes/reagents to the carrier matrix. It is advantageous to bind the dye/reagent to the matrix to prevent them from bleeding out when contacted with a fluid. Gelatin is taught as a suitable binder.

It would have been within the skill of the art to further modify JP 2000105230 in view of Greyson et al. and use a gelatin binder to gain the above advantages.

The court decided In re Antonie (195 USPQ 6) that a simple difference in size over the prior art would have been obvious. JP 2000105230 is silent to the interlayer thickness, but in view of Antonie above, the difference between the taught thickness and the claimed would have been obvious.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 61123682A teaches a methine dye composition capable of

Art Unit: 1743

determining moisture. This reference fails to disclose if the color of the methine disappears when the moisture is detected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A Alexander whose telephone number is 703-308-3893. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9319 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Lyle A Alexander
Primary Examiner
Art Unit 1743

March 3, 2003